

CLAIMS

1. A method for treating a lung comprising:
fluidly connecting the lung with an extrapleural airway such that air may pass directly from the lung to the extrapleural airway.
2. The method of claim 1 further comprising creating a channel through a wall of the lung and creating a channel through a wall of the extrapleural airway.
3. The method of claim 2 wherein said channels are created using a radio frequency energy delivering device.
4. The method of claim 2 wherein said lung and extrapleural airway are fluidly connected with a conduit having a passageway for air to flow through.
5. The method of claim 4 wherein said conduit comprises a first portion, second portion and a center section between said first portion and said second portion, said first portion and said second portion being adapted to secure said conduit to said lung and extrapleural airway.
6. The method of claim 5 wherein each of said first portion and second portion of said conduit comprises a plurality of extension members which are deflectable such that when said conduit is deployed, said extension members from said first portion substantially oppose said extension members from said second portion such that tissue may be sandwiched therebetween.
7. The method of claim 4 further comprising providing a sealant to an exterior surface of the conduit to prevent side flow of air around the conduit.

8. The method of claim 7 wherein said sealant comprises talc.
9. The method of claim 7 wherein said sealant is fibrin glue.
10. The method of claim 7 wherein said sealant comprises cyanoacrylate.
11. The method of claim 5 wherein said center section has a length in the range of 0.5 to 50 mm.
12. The method of claim 11 wherein the center section has a length of 1 mm.
13. The method of claim 4 wherein the conduit includes a biocompatible coating.
14. The method of claim 13 wherein said coating promotes wound healing.
15. The method of claim 4 further comprising deploying at least one intrapleural conduit to maintain a channel surgically created in an intrapleural airway.
16. The method of claim 6 wherein the extension members form right angles when deployed.
17. The method of claim 6 wherein the extension members form angles between 90 and 135 degrees when deployed.
18. The method of claim 2 further comprising detecting blood vessels prior to said step of creating channels in said extrapleural airway wall and lung wall.
19. The method of claim 4 wherein said conduit comprises at least one visualization feature on an exterior surface of said conduit.

20. The method of claim 2 wherein said creating the channel through the extrapleural airway wall is performed prior to said creating the channel through said lung wall.
21. The method of claim 2 further comprising fixing said extrapleural airway wall to said lung wall.
22. The method of claim 21 wherein said creating a channel through said extrapleural airway wall and said lung wall is performed subsequent to said fixing said extrapleural airway wall to said lung wall.
23. The method of claim 22 wherein said lung wall is the visceral pleura.
24. A method for improving gaseous exchange in a lung comprising:
fluidly connecting an extrapleural airway with a tissue structure within the lung such that air may directly pass from the tissue structure within the lung to the extrapleural airway.
25. The method of claim 24 wherein said tissue structure is parenchymal tissue.
26. The method of claim 24 wherein said tissue structure is an airway.
27. The method of claim 24 wherein said tissue structure is alveoli.
28. The method of claim 24 wherein said extrapleural airway is a trachea.

29. A method for altering gaseous flow in a lung having a pleural membrane comprising:
- creating a channel through an extrapleural airway wall and the pleural membrane such that air may pass directly from the lung into the extrapleural airway.
30. The method of claim 29 further comprising fixing at least a portion of the extrapleural airway wall to the pleural membrane prior to said creating the channel therethrough.
31. The method of claim 30 wherein said fixing is performed by deploying an adhesive between said wall and membrane.
32. The method of claim 30 wherein said fixing is performed by deploying a tissue fastener, said tissue fastener having a body extending through said wall and membrane and having two end portions adapted to hold the wall and the membrane together as said channel is created therethrough.
33. The method of claim 29 further comprising ventilating an opposite lung.
34. The method of claim 30 further comprising deploying a conduit in said channel to maintain an open passageway through said wall and said membrane.
35. The method of claim 34 further comprising providing an adhesive substance to said channel on the outside of said conduit, such that said conduit is further secured in said channel and air leaks around said conduit are minimized.
36. The method of claim 29 comprising detecting the presence of blood vessels prior to said step of creating the channel through the extrapleural airway wall and the pleural membrane.

37. The method of claim 30 further comprising deploying a conduit in said channel to maintain an open passageway through said wall and said membrane.
38. The method of claim 37 further comprising removing said tissue fastener after said deploying the conduit in said channel.
39. A conduit for fluidly connecting an extrapleural airway with the lung comprising:
a body having ends and a passageway extending therethrough; and
an invertible end portion extending from each end of said body, said end portion configured such that when the conduit is in a first state the end portions extend away from one another and when said conduit is in a second state said end portions extend towards one another, wherein said conduit is sized to fluidly connect said extrapleural airway and said lung.
40. The conduit of claim 39 wherein said conduit is made of an elastomeric material.
41. The conduit of claim 39 wherein said first end portion and second end portion are curved.
42. The conduit of claim 39 wherein said first end portion and second end portion are bowl-shaped.
43. The conduit of claim 39 further comprising a sealant disposed on an outer surface of said conduit.